

Opinion

The Changing Face of Veterinary Professionalism—Implications for Veterinary Education

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Abstract: Veterinary professionals need to maintain currency with the rapidly expanding knowledge, techniques, and diagnostic skills available to the profession, while also accommodating the developing needs and expectations of clients and other veterinary stakeholders. Today, societal influence and expectations impose a heavy demand on veterinary practitioners, making it essential for tertiary veterinary education to equip veterinary graduates with the skills necessary to face these challenges and flourish in their profession. This paper explores four challenges faced by veterinary education in the development, maintenance, and upkeep of professional skills training: the divarication between employer expectations and veterinary education, the impact of demographic changes on the profession, the influence of institutional structures on the teaching of professionalism, and the risks associated with outdated models of professionalism training. The teaching of professionalism in veterinary education must continually evolve. One issue that may hinder this process is a divergence between the expectations of employers and tertiary institutions regarding the employability skills required by veterinary graduates. Veterinary professionalism education must also consider changing demographics within the profession and within society to provide all new graduates with the skills and tools necessary to succeed in the workplace, establish a sustainable work–life balance, combat burnout in new graduates, and be equipped to serve the general public. Failure to do this could result in professionalism teaching becoming complicit in a socialization process that perpetuates gender and cultural inequalities. This paper outlines some of the changes that have occurred in the veterinary profession and their implications on veterinary professionalism education. The article champions the necessity for veterinary professionalism education to evolve in concert with the constant changes in the profession.

Keywords: veterinary; professionalism; professional skills; employers; demographics; models of professionalism; institutional structures



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1. Introduction

The identity of a veterinary professional is characterized by the need and the capacity to balance the components of the rapidly changing environment of medical knowledge, animal welfare, client and colleague communication, business finesse, and statutory obligations [1]. Veterinary professionals must, therefore, maintain currency with the rapidly expanding knowledge, techniques, and diagnostic skills available to the profession and must also be able to manage these in the face of the developing needs and expectations of clients and other veterinary stakeholders [2]. The ability to balance competing core values has come to lie at the very heart of contemporary healthcare professionalism [3], such that it is now no longer sufficient for veterinary students to simply acquire the knowledge and technical skills necessary for practicing veterinary medicine. Nor is it sufficient for students to simply replicate the professional behaviors that will be expected of them as practitioners.

Rather, professionalism education must ensure that students fully internalize its precepts into their own system of core values, attitudes, and tendencies and that these dictate their professional and ethical behavior [4].

The professionalism discourse directed toward the public has aimed to foster trust and reassure clients that practitioners are qualified, reliable, and honest [5]. Until recently, this discourse has served to sustain public confidence in the profession and to foster solidarity and promote common interests within its members. Today, however, multiple competing perspectives threaten the ascendancy of the traditional veterinary professional discourse, as it no longer appears to effectively encompass the changes occurring within society [5]. Maintaining an honorable professional identity, therefore, involves addressing several present-day value orientations, which not only include the general commitment to learning and practicing a specific set of veterinary skills but, now, also include the adoption of ‘behaviour and practices that are authentically caring’ [6] (p. 2152). In recognition of this duality, veterinary professionalism education is having to change from concentrating on teaching students to demonstrate appropriate professional behaviors toward supporting students to create their own authentically caring professional identities [7]. Professionalism would, consequently, be the natural result if students could be nurtured to form an identity that espouses compassion, justice, and balance.

This paper considers some of the changes that are of particular importance in the context of present-day value orientations within the veterinary profession. It specifically explores four key challenges faced by veterinary education in the development, maintenance, and upkeep of professional skills training: firstly, the divergence between employers’ expectations of the capabilities of veterinary graduates versus the level of competence that can be attained within the duration of a veterinary degree program; secondly, the impact of demographic changes, particularly (but not exclusively) within the veterinary profession itself; thirdly, the influence of changing institutional structures on the teaching of professionalism and professional skills; and finally, outdated modes of education in professionalism.

2. Areas That Impose Challenges upon Professionalism Education

(i) Expectations of employers

The notion of a divergence between the expectations of employers and their perceived capabilities of graduates has been accentuated over recent years [8] through a wide range of surveys of employers, veterinary associations, graduates, and alumni [9–13]. Increased employer cooperation regarding tertiary education, lifelong learning activities, and research into best practice for tertiary institution–employer collaboration thus needs to be developed [14–18]. Farias [19] emphasized the importance of tertiary institutions creating and maintaining partnerships with the employers hiring their graduates, since the need for collaboration is vitally important to assist learners who are seeking an edge in a competitive job market. Rather than just concentrating on the delivery of specialized knowledge in core disciplines, tertiary education should also deliver general knowledge that is transferable across all disciplines as this, in essence, is the underlying theme of professionalism and employability [19].

Candy and Crebert [20] identified two features of tertiary education that may hinder the adequate preparation of students for their prospective roles in the workplace. Firstly, the focus in universities is often on competition between individuals, as opposed to the collaborative teamwork that is favored in the workplace. Secondly, tertiary education promotes the acquisition of academic knowledge, whereas the workforce has greater focus on task-specific projects. Thus, Shivpuri and Kim [21] highlighted the divide between what universities deem important for students to learn and what employers value in a new graduate. In their study, employers rated interpersonal skills as the most important attribute for graduates, while academics rated knowledge to be most important. Both parties agreed only on the importance of ethics and integrity [21]. Further studies have also revealed that employers and recent graduates often rank veterinarians’ personal attributes and interpersonal skills to be of greater importance than veterinary-specific knowledge and

skills [22,23]. Likewise, Schull and colleagues [24] noted that, apart from veterinary-specific knowledge and technical skills, employers were interested in applicants' personal attributes (i.e., their personality and character), their interpersonal skills (i.e., how candidates present themselves and interact with others), and whether these attributes come together as a 'job match' for the specific role. Interestingly, in this context, it is widely held (although weakly documented) that employers of veterinary graduates often seem to take new graduates' proficiency in knowledge and technical skills as implicit, whereas their personality and professionalism must be gauged. Indeed, in the study of Pavlin [18] across a spectrum of employers, there was a consensus that finding the right match was a critical consideration when recruiting new graduates. Furthermore, each graduate has a different personality, discrete needs, and a distinct skill set, and this may not always suit the needs of a particular workplace at a particular time [24]. Thus, veterinary schools need to equip students with an awareness of their own attributes and capabilities and how to assess and communicate their fit with the requirements of prospective employers. Further, such considerations may mean that, when soliciting the views of employers, their focus is disproportionately directed toward expectations around graduates' professionalism attributes.

The urgency of this issue was highlighted by the 'VetFutures' survey, conducted by the British Veterinary Association in 2015 in conjunction with the Royal College of Veterinary Surgeons (UK), which found that only 17% of veterinary graduates (five years or more after graduating) felt their degree prepared them 'very well' for their career [25]. The issue of divergent expectations has, therefore, raised the potential beneficial impact of employers' input into curriculum design. Little research on the effects of collaborations between employers and higher education institutions has been conducted in veterinary education, although accreditation guidelines mandate that some level of employer feedback should factor into the curriculum. Mason and colleagues [26] reported positive outcomes from this collaboration in designing effective courses, across multiple disciplines, for the preparation of new graduates entering the work force. On the other hand, criticism has been raised that the move toward more skills-based education represents a paradigm shift away from the core values of higher education. Evers and colleagues [27], however, refuted this criticism, arguing that it represents a compromise with employers to increase the success rate of graduates finding employment. Nevertheless, such concerns further illustrate the lack of consensus between the expectations of academia and the requirements of the workplace and, again, highlight the need for both parties to collaborate more closely with regards to the employability skills expected from graduates [18,21]. Hence, there is a clear need for on-going dialogue between veterinary degree providers and their stakeholders over the topic of professionalism to meet the needs of both employers and graduates.

(ii) Changing demographics within the profession

Professionalism education must also consider the changing demographics within the veterinary profession. There has been a steady and consistent increase in the proportion of women within the veterinary profession. Between 2009 and 2018, the overall proportion of female full-time-equivalent personnel in the New Zealand (NZ) workforce increased from 42% to 56% [28]. In 2018, 62% (69,908/113,394) of veterinarians in the United States of America (USA) were women [29] and, in 2021, over two-thirds of respondents in the workforce survey of the Australian Veterinary Association were women [30]. The shift in gender ratio in the practicing profession is, of course, underpinned by the pattern of enrolments in veterinary degree courses. For example, in the Massey University School of Veterinary Science in NZ in 2019, 79% (468/590) of the enrolled veterinary students were women. Similarly, at Saint George's University School of Veterinary Medicine in Grenada in 2022, 83% (648/780) of registered students were women.

This demographic shift has influenced the veterinary profession in several ways. As far back as 2000, Phillips-Miller and colleagues [31] reported that women veterinarians experienced significantly higher levels of domestic demands, including marital and family responsibilities, than their male counterparts. Female veterinary students tend to believe more strongly than their male counterparts that the bond between clients and their pet

should be a concern of the veterinarian and, hence, consider that direct instruction in the human–animal bond needs to be given more priority in veterinary education [32]. Women veterinary students also appear to be more interested in training that equips them to deal effectively with the emotional aspects of practice, so they are more likely to perceive that the delivery of this material in present veterinary education programs is inadequate [33].

Furthermore, Hatch and colleagues [34] suggested that women veterinarians are at greater risk for the development of stress, anxiety, depression, compassion fatigue, and burnout than their male counterparts. These findings must, however, be interpreted with caution, as the risk factor may be related as much to age rather than to gender, with younger veterinarians more at risk for stress and burnout than older veterinarians [35]. In 2019, NZ reported the median age of veterinarians as 51 years for men and 38 years for women [30]. Nonetheless, these findings may highlight the need to place additional emphasis on skills that support wellbeing and resilience in the veterinary professionalism education program, along with examining the effects of societal roles and societal implications on this women-dominant workforce.

The National Commission on Veterinary Economic Issues estimated in 1999 that 95% of the veterinarians working in traditional private practice in the USA identified as European/White [36]. Ethnicity data collected for veterinarians registered in NZ in 2019 indicated that only 2% identified as Māori (the indigenous people of NZ) and 4% as Asian. White veterinarians still made up 91% of the NZ workforce [37]. Today, however, veterinarians function in a society of changing demographics and core values, thus making levels of cultural competence and cultural humility important considerations within the profession.

Minority representation in veterinary medicine continues to be low, despite many veterinary schools adopting selection initiatives that encourage minority student enrolment. In 2004, minority student enrolment in the USA was only 9.6% [38]. While it has improved to just under 23% of veterinary applicants in 2019 [29], enrolment is still poor, considering that minoritized ethnicities comprise almost 40% of the US population [39]. In NZ, only 5.7% of veterinary applicants, between 2003 and 2019, identified as Māori, although Māori comprise 16.5% of the NZ population [37]. This is a multifaceted problem involving issues such as societal factors, veterinary admissions factors, student retention and student support factors, creating safe spaces, and supporting veterinarians from all backgrounds in the workforce.

Veterinary education must also take responsibility for teaching cultural humility and highlighting possible cultural and ethnic differences in attitudes about animals so that veterinary graduates can best serve their increasingly diverse client base. The consideration of cultural identity should be viewed as integral to, not separate from, establishing relevant veterinary knowledge [40]. This multifaceted issue is perpetuated by the influence of institutional structures and outdated models of professionalism.

(iii) The influence of institutional structures

Government and corporate institutional structures have long impacted societal expectations and standards. A veterinarian's professional identity is no longer just a personal construct but can also be considered as being 'socially constructed and sustained through institutional structures' [41] (p. 832). The implications of this are that the values and culture of institutions have become important elements in the determination of professional behavior for new graduates and that these determinants may outweigh what is taught in their veterinary degree [42]. The traditional privileges afforded by society to the medical professions have, however, been progressively challenged by the potential for conflict of interest with powerful pharmaceutical companies and government agencies [43].

In addition, changing structures within the profession need to be considered when teaching professionalism in veterinary schools. In NZ (as, indeed, in most developed countries), there is a strong trend toward shifting from small (often single veterinarian) practices to larger corporate veterinary businesses, with increased specialization and referral care. Apart from highlighting the necessity to focus on communication skills and interpersonal collaborative skills in veterinary education [1], this trend has required that

graduates accede to the corporate ethos of professionalism. Whilst one hopes that these corporate norms are aligned with best practice in professionalism, there is a risk that the individuals' development of their own professional morals could be overwhelmed by the corporate ethos.

Changes to farming practices have also altered the demands placed on large-animal veterinary practitioners, as herd sizes have grown and farms are often controlled by farming conglomerates or corporations. Veterinarians are now expected to engage in herd health programs rather than to treat individual cows. This requires a different skill set, such as big-data analysis and manipulation, business skills, and agri-commerce in veterinary education [44]. Furthermore, there is increasing emphasis on concepts of One Health, global health, and sustainability within the veterinary profession, a further new direction that must be accommodated in veterinary education [30].

(iv) Whether present models of teaching professionalism still have currency

The multiple changes in the profession and in the expectations of society appear to risk creating redundancy in contemporary models of professionalism education. It has been traditionally recognized that conforming to the accepted ways of thinking and behaving within the profession remains the key component of educating students in professionalism. Standardization in medical training has long been considered the acceptable pathway to success due to the legitimacy afforded by the biomedical and scientific models [45]. This, however, has created the risk that homogeneity and conformation to particular agendas could be forced upon students. Professionalism teaching could, therefore, represent part of a socialization process that has perpetuated gender and cultural inequalities. Furthermore, the socialization of veterinary students into the profession could be influenced by professional hierarchies that embed inequities and do not account for students from diverse cultural backgrounds [41]. By conforming to traditional models of professionalism, students may be forced to suppress manifestations of their cultural, political, economic, or gender orientations especially as the veterinary profession has often represented the viewpoint of White, male, and class-privileged authorities [45].

Considering such concerns, Shirley and Padgett [5] strongly believed that the term 'professionalism' has become too deeply entangled with physicians' power and privilege and is no longer useful as an organizing ethical framework. They argued that professional discourse has sought to obscure this power and privilege over the interests of others by making it seem natural and appropriate. If this is so, the corollary would be that veterinary professionalism needs to develop to represent an affectively neutral class of experts dedicated to collective societal wellbeing rather than self-interest [41]. As the attention given to professionalism increases in veterinary education, the challenges currently facing the profession must be accommodated to avoid the '... nostalgic appeals to the good old days when physicians were virtuous cowboys—riding free on the healthcare range, always available and kind to patients, and always with an invisible wife at home to keep dinner warm' [5] (p. 37).

Furthermore, it has been argued that the evaluative criteria of competency and success that are currently prevalent in contemporary medical education may be inimical to the needs for the assessment of professional behavior [46]. Objectivity, replicability, and generalizability are currently regarded as important attributes in the teaching and assessment of veterinary medical skills and knowledge, such that a strong adherence to such pedagogies has spilled over into the teaching of veterinary professionalism. Alternative domains of knowledge and modes of enquiry, embracing philosophy, sociology, and spirituality may in fact better serve the teaching and assessment of veterinary professionalism [7,46]. One step in this direction might be to acknowledge and reward students who demonstrate good veterinary professional behavior, particularly if greater emphasis is placed upon the positive acknowledgement of professionalism achievements than upon censuring of unprofessional behavior and attitudes [47,48].

3. Towards a Revised Pedagogical Model for Teaching Professionalism in Veterinary Programs

Fostering the development of professionalism in a veterinary qualification remains a challenge, as it involves personal and intangible factors such as self-awareness, reflective practice, and resilience [49] rather than the more tangible factors of knowledge, critical thinking, and technical skills that underpin the remainder of the curriculum. The risk is, therefore, that the teaching of professionalism can be regarded as an ‘outlier’ by students that can be marginalized in their learning processes. Hence, the teaching and assessment of professionalism needs to be formally and explicitly identified in the curriculum, and careful attention is needed to define, position, and frame professionalism within the relevant veterinary clinical contexts [47]. Whilst there are clearly many routes and methodologies by which professionalism education can be built into the curriculum, there is an increasingly clear consensus (e.g., Lloyd and Walsh [50]; Goldie et al. [51]; Birden and Usherwood [52]) on the benefits of formal exposure to professionalism teaching from very early on in the program in contexts that are strongly aligned with clinical exposure. The benefits of early clinical exposure both per se and as a contextual anchor for many other aspects of the pre- and para-clinical curriculum are well rehearsed [47,51,53], but its benefits as a vehicle for initiating socialization into the profession have received less attention. Nonetheless, it is argued [54] that professionalism instruction is most likely to be perceived as relevant when it is framed and delivered in terms of tangible employability and clinical outcomes.

Achieving alignment between employers’ expectations of the capabilities of graduates and the level of competence that graduates can attain within the duration of the veterinary program remains difficult. To foster better alignment, veterinary degree programs need to accept the input of clinical practitioners regarding the professional skills required of the graduate. Alignment will be further enhanced by providing better focused ‘Workplace-Integrated Learning’ experiences for veterinary students. Furthermore, the values, ethics, and behaviors displayed by clinical teachers must mirror those encouraged in the students [55]. Failure to do so will risk undermining the professional development environment and will diminish the impact of the curriculum [56,57].

Many similar issues pertain to the professionalism discourse considering the demographic changes within the veterinary profession. Clearly, in terms of the curriculum, the ‘lack of attention to diversity and multiculturalism has the potential to negatively impact the effectiveness of veterinarians and of the profession in promoting animal and human health’ [58] (p. 407). To accommodate increasingly ethnically diverse student populations and animal-owning clientele and to contradict the notion that veterinary medicine is ‘culturally blind’, the basic principles of genuineness, warmth, empathy, and unconditional positive regard must be included in a professionalism curriculum [58].

Similar considerations pertain to the professionalism discourse relating to changing institutional structures. Some of the changed requirements of graduates working in food-animal practice require proficiency in big-data analysis and manipulation, business skills, and understanding of agri-commerce. In terms of the interaction between veterinarians and agribusiness stakeholders, the level of communication is, clearly, different to that with the owner of an individual pet animal. It is, however, no less amenable to the learning styles of professionalism education than are the one-to-one interactions of the consulting room.

Taken together, these findings highlight the need for a pedagogy of professionalism that first engages with students early in the course and continues uninterrupted thereafter. Furthermore, the teaching of professionalism is most effective when it is aligned with, and fully embedded in, a clinical curriculum that itself extends throughout the entire program. The findings also highlight the need for the evaluative criteria of competency and success to accommodate alternative domains of knowledge and modes of enquiry. Furthermore, the intended learning outcomes of the professionalism syllabus need to be aimed at achieving the highest levels of Bloom’s taxonomy for the affective domain, to encourage veterinary students to adopt and internalize professional behaviors and core values.

Veterinary professionalism remains in constant flux as societal influence and expectations have influenced the role of the veterinary practitioner. This has resulted in a continuous evolution of the skills required by practicing veterinarians to flourish in the profession [59]. Clearly, veterinary professionalism education must evolve in concert with these constant changes in the profession.

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